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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,956	03/26/2004	John C. Bischof	110.02150101	9825

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EXAMINER

TOY, ALEX B

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/810,956	Applicant(s) BISCHOF ET AL.	
	Examiner Alex B. Toy	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 7-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/2/05</u> | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Invention I, claims 1-6, in the reply filed on October 27, 2005 is acknowledged. Claims 7-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected Inventions II and III, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 27, 2005.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lentz (U.S. Pat. No. 6,231,536 B1) in view of Gudov (U.S. Pat. No. 5,067,952).

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Regarding claim 1, Lentz discloses a method of performing a thermal surgical procedure, comprising:

identifying biological material to undergo the thermal surgical procedure (col. 1, ln. 63-64); and

contacting the biological material with an inflammation inducing composition, wherein inflammation is induced in at least a portion of the identified biological material (col. 2, ln. 26-33).

The claim differs from Lentz in calling for adjusting the temperature of the identified biological material, wherein at least a portion of the biological material is destroyed after undergoing the thermal surgical procedure. Lentz discloses treating the biological material with radiation but is silent on the specific type of radiation.

Gudov, however, teaches using electromagnetic radiation to treat malignant tumors at a high enough temperature to kill the cancerous cells (col. 1, ln. 52-65, col. 2, ln. 19-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used electromagnetic radiation in the invention of Lentz to adjust the temperature of the identified biological material, wherein at least a portion of the biological material is destroyed after undergoing the thermal surgical procedure in view of the teaching of Gudov as an obvious type of radiation that is well-known in the art.

Regarding claim 3, Lentz discloses the method claim 1 in view of Gudov. In addition, Gudov discloses adjusting the temperature to comprise raising the

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temperature above a physiological temperature of the biological material (col. 3, ln. 15-26).

Regarding claim 4, Lentz discloses the method of claim 1 in view of Gudov. In addition, Lentz discloses that the biological material is selected from the group consisting of cells, tissues, and combinations thereof (col. 1, ln. 63-64).

Regarding claim 5, Lentz discloses the method of claims 1 and 4 in view of Gudov. In addition, Lentz discloses that the cells are tumor cells (col. 1, ln. 63-64).

Regarding claim 6, Lentz discloses the method of claims 1 and 4 in view of Gudov. In addition, Lentz discloses that the tissues are selected from the group consisting of tumor tissues, liver tissue, prostate tissue, breast tissue, kidney tissue, vascular tissue, gastrointestinal tissue, muscle tissue, skin tissue, connective tissues, and combinations thereof (col. 1, ln. 63-64 and col. 5, ln. 29-32).

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lentz ('536) in view of Marchenko (U.S. Pat. No. 4,528,979).

Regarding claim 1, Lentz discloses a method of performing a thermal surgical procedure, comprising:

identifying biological material to undergo the thermal surgical procedure (col. 1, ln. 63-64); and

contacting the biological material with an inflammation inducing composition, wherein inflammation is induced in at least a portion of the identified biological material (col. 2, ln. 26-33).

The claim differs from Lentz in calling for adjusting the temperature of the identified biological material, wherein at least a portion of the biological material is destroyed after undergoing the thermal surgical procedure. Lentz discloses treating the biological material with radiation but is silent on the specific type of radiation.

Marchenko, however, teaches using cryo-ultrasonic radiation to kill the cancerous cells of malignant tumors (col. 1, ln. 35-39, col. 3, ln. 17-32). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used cryo-ultrasonic radiation in the invention of Lentz to adjust the temperature of the identified biological material, wherein at least a portion of the biological material is destroyed after undergoing the thermal surgical procedure in view of the teaching of Marchenko as an obvious type of radiation treatment that is well-known in the art.

Regarding claim 2, Lentz discloses the method claim 1 in view of Marchenko. In addition, Marchenko discloses adjusting the temperature to comprise lowering the temperature below a physiological temperature of the biological material.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

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US 4872458 A	USPAT	Kanehira; Katsuyuki et al.
US 6305380 B1	USPAT	Hellstrand; Kristoffer et al.
US 6451044 B1	USPAT	Naghavi; Morteza et al.
US 6749624 B2	USPAT	Knowlton; Edward W.
US 6772766 B2	USPAT	Gallo; Richard et al.
US 6805701 B1	USPAT	Cortes; Marta

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex B. Toy whose telephone number is (571) 272-1953. The examiner can normally be reached on Monday through Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AT *AT*
11/2/05

Michael Peffley
MICHAEL PEFFLEY
PRIMARY EXAMINER